

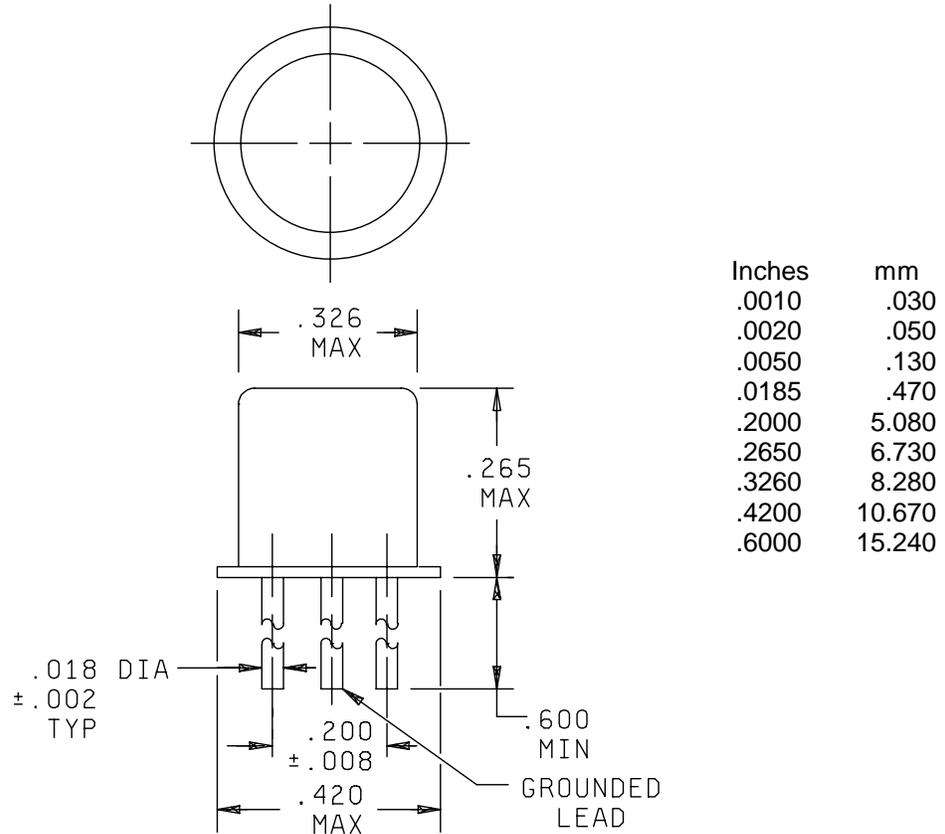
INCH-POUND
MIL-PRF-3098/103E
19 December 2003
SUPERSEDING
MIL-PRF-3098/103D
27 August 1997

PERFORMANCE SPECIFICATION SHEET
CRYSTAL UNIT, QUARTZ, CR101/U

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-PRF-3098.

Pertinent characteristics: 7 MHz to 20 MHz; fundamental; noncontrolled; antiresonance.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Marking to be in accordance with MIL-PRF-3098.

FIGURE 1. Crystal unit - CR101/U.

REQUIREMENTS:

Dimensions, marking, and configuration: See figure 1.

Frequency range: 7 MHz to 20 MHz, inclusive.

Frequency tolerances: ± 50 ppm.

Equivalent resistance: 7 MHz to 10 MHz: 30 ohms.

10+ MHz to 20 MHz: 25 ohms.

Antiresonance, load capacitance: 30 pF ± 0.5 pF.

Mode of oscillation: Fundamental.

Operating temperature range (noncontrolled): -55°C to $+105^{\circ}\text{C}$, inclusive.

Rated drive level: 1.0 mW, maximum.

Capacitance, shunt: 7 pF, maximum.

Shock (specified pulse):

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 10 percent.

Thermal shock:

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 10 percent.

Vibration: Method 204, MIL-STD-202, test condition B.

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 10 percent.

Aging:

Frequency change permitted: ± 5 ppm.

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:

Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:

Army - CR

Agent:

DLA - CC

Review activities:

Army - AR, MI, SM
Navy - AS, CG, MC, OS, SH
Air Force - 19, 99

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